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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,787	10/05/2005	Hee Hyeok Hahm	123051-05016002	5698
43569 7590 07/30/2007 MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			EXAMINER TORRES, MARCOS L	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 07/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,787

Applicant(s)

HAHM ET AL.

Examiner

Marcos L. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10-5-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on 10-5-05 is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

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Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park KR 10-0292089 in view of Skog US006427076B2.

As to claim 1, Park discloses a method of providing an arbitrary sound as an RBT (Ring Back Tone) in a communication network (see abstract), comprising: a first step, conducted by a subscriber database, of furnishing a call-originating exchanger with first information on whether RBT is to be replaced or not (see page 17, line 2 – page 19, line 10) and second information informing a route to sound providing means through a response to a location request message received from the call-originating exchanger that sends the location request message to the HLR when a call connection is requested (see page 17, line 23 – page 19, line 6); a second step, conducted by the call-originating exchanger, of requesting a trunk connection to both of a call-terminating exchanger and the sound providing means based on the response including the first and the second information while furnishing the sound providing means with information identifying a called (see page 17, line 2 – page 19, line 10); and a third step, conducted by the sound providing means, of selecting an RBT-replacing sound based on the called-identifying information, and providing the selected RBT-replacing sound for a caller through the call-originating exchanger

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the trunk connection is made to (see page 18, line 25 – page 19, line 6).

Although Park discloses the use of querying the HLR regarding a called terminal (page 18, lines 2-13), Park does not expressly teach the use of a HLR as the subscriber database. Skog discloses the use of an HLR for the subscriber database. As shown in Skog, the MSC [call terminator] is associated to a HLR, which stores all management data relating to all mobile stations in the network (115-Figure 1 and Figure 2; abstract; column 5:line 31-column 6:line 3).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Park to include the HLR as the subscriber database of claim 1, as an HLR is inherently used to store subscriber data relating to value added services. This is beneficial it allows Park to analyze the provided information from a database already established in wireless networks. As with other services available via landline telephones (e.g. caller ID, special ring tones, 3 way calling, call waiting, internet usage, etc.), users accustomed to having the service would also like to have the same abilities with their wireless telephone.

As to claim 2, Park discloses the method wherein, if the call-originating exchanger detects through the call-terminating exchanger that the call is answered while the selected RBT- replacing sound is being provided for the caller, the call- originating exchanger requests the sound providing means to release the established trunk connection to terminate transmission of the RBT- replacing sound (see page 20, line 19 – page 21, line 8).

As to claim 4, Park discloses the method of claim 1, wherein the request of trunk connection from the originating exchanger to the sound providing means is selectively conducted based on the first information included in the response.

As to claim 5, Park discloses the method wherein the first information indicates whether an RBT is to be replaced or not and is set in the HLR based on specific key information received from a terminal of the called (see page 17, line 2-11).

As to claim 6, Park discloses the method wherein the first information is written in a reserve field allocated in value-added service parameters of subscriber's profile (see page 18, lines 14-21).

7. Claims 3 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Skog as applied to claim 1 above, and further in view of Deeds US 20040204146A1.

As to claim 3, Park discloses the method wherein the sound providing means searches for the selected RBT-replacing sound specified for the called through communication with a storage controller (see page 20, lines 12-18) Park and Skog does not specifically disclose operating based on internet protocol. In an analogous art, Deeds discloses a server controller in connection to the Internet, thereby using an Internet based protocol (see par. 0022, 0004). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to connect to biggest wide area network and easily and inexpensively transfer data such as ring tones for enhanced user satisfaction by providing more services.

As to claim 10, Park discloses the method wherein the storage controller changes a sound code of an RBT-replacing sound specified for the called with another code through communication (see page 20, lines 12-18). Park and Skog do not specifically disclose a web server operating based on Internet protocol. In an analogous art, Deeds discloses a server controller in connection to the Internet, thereby using an Internet based protocol (see par. 0022, 0004).

As to claim 11, Park discloses the method wherein said another code is a code related with already stored RBT-replacing sound in the sound providing means (see page 20, lines 12-18).

As to claim 12, Park discloses the method wherein, after being connected to the sound providing means and the storage controller, the server changes the RBT-replacing sound based on subscriber identifying information (see page 20, lines 12-18). Park and Skog do not specifically disclose entering data through an input web page. In an analogous art, Deeds discloses entering identifying information through an input web page (see par. 0022, 0004).

8. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Skog as applied to claim 1 above, and further in view of Kim WO 00/49793.

As to claim 7, Park and Skog disclose everything as shown above except for wherein the sound providing means determines the RBT replacing sound based on who the caller is, which group the caller belongs to among several groups classified by the called, and/or call time. Kim discloses wherein the sound providing means determines the RBT-replacing sound based on who the caller

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is, which group the caller belongs to among several groups classified by the called, and/or call time (page 13, line 25-page 14, line 8; page 15, line 1-12).. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of PARK and SKOG to include differing ring back tones depending on which group and/or time of day, as taught by KIM, as PARK discloses that the disclosed invention can be used in conventional ring back tone systems (page 16, lines 2-16). This is beneficial in that Ring Back tones can be specifically targeted to groups that would more likely find the sound appealing.

As to claims 8 and 9, PARK discloses method wherein a signal requesting the call connection to the called includes terminal identifying information of the called party (see page 18, lines 2-13). Kim discloses identifying information (subscriber telephone numbers of the called party) and the caller (see abstract).

Conclusion

9. Examiner's note: Examiner has cited particular sections in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

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Hand delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos L. Torres whose telephone number is 571-272-7926. The examiner can normally be reached on 8:00am-6:00 PM alt. Wednesday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-252-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Marcos L Torres
Examiner
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